

# (12) UK Patent Application (19) GB (11) 2 250 266 A

(43) Date of A publication 03.06.1992

(21) Application No 9103528.7

(22) Date of filing 20.02.1991

(30) Priority data  
(31) 9003419 (32) 29.11.1990 (33) ES

(71) Applicant  
Albatex S L

(Incorporated in Spain)

Avda Ramon y Cajal, S/no, 46870 Onteniente  
(Valencia), Spain

(72) Inventor  
Burhan Ezzat Suleiman

(74) Agent and/or Address for Service  
Marks & Clerk  
57-60 Lincoln's Inn Fields, London, WC2A 3LS,  
United Kingdom

(51) INT CL<sup>6</sup>  
H05B 6/64, B65D 81/34

(52) UK CL (Edition K)  
B8K KXX K2KX K2K3 K2K4  
H5H HMK  
U1S S1097 S1912 S2400

(56) Documents cited  
EP 0298711 A1 EP 0256791 A2 US 4806371 A  
US 4571337 A US 4548826 A

(58) Field of search  
UK CL (Edition K) B8K KXX, H5H HMK  
INT CL<sup>6</sup> B65D, H05B

## (54) Transformable edible product package

(67) A transformable edible product package comprises a sealed bag 1 treated against damage from microwave radiation and containing corn kernels. The bag has side folds 2 and at least one transverse crease 3 to enable it to lie flat but swell when subjected to microwave irradiation (see Fig 2, not shown).

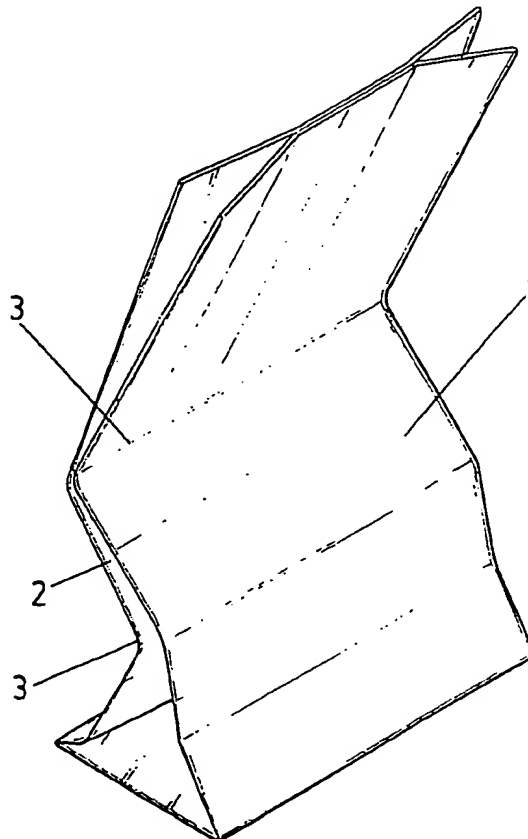


FIG.1

GB 2 250 266 A

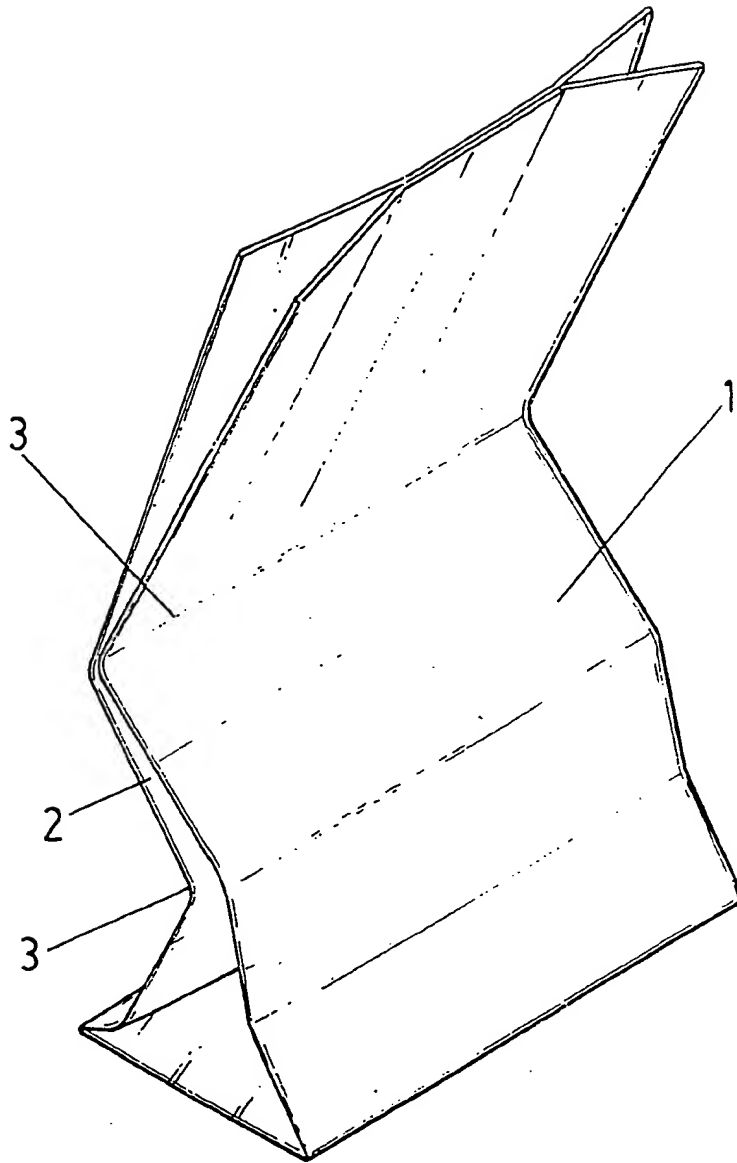


FIG.1

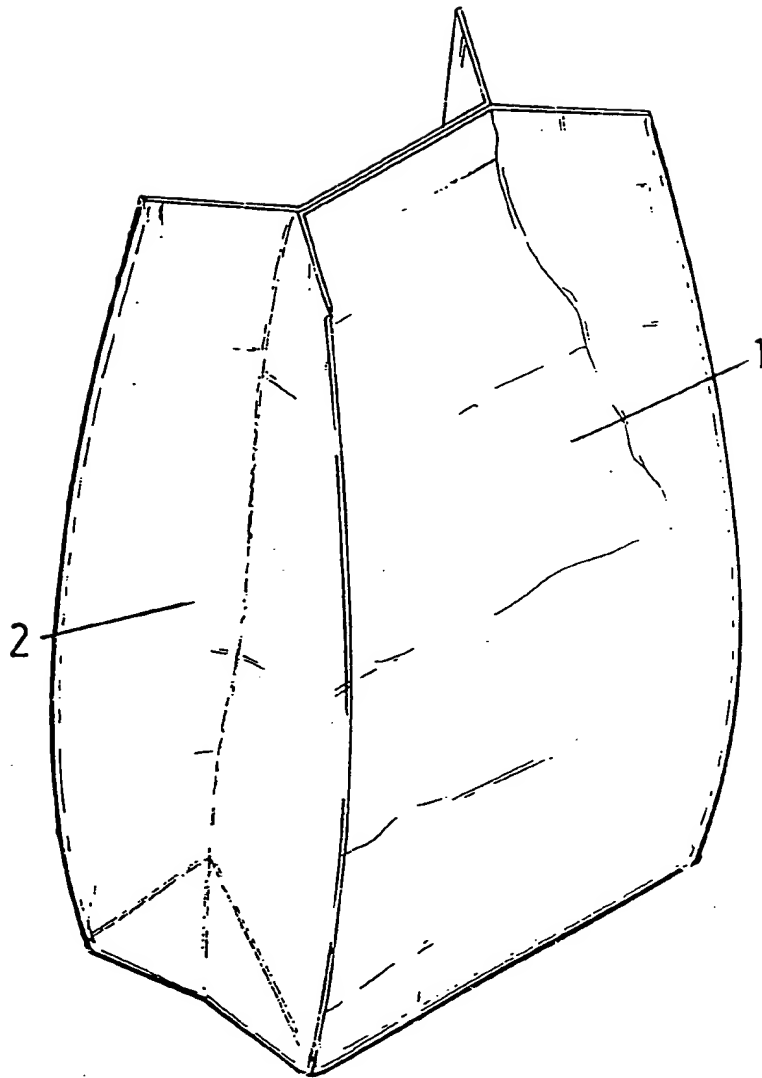


FIG.2

1      TRANSFORMABLE EDIBLE PRODUCT PACKAGE

As is expressed in the title of this specification,  
the present invention refers to a container of an edible  
5 product which after heating in a microwave oven converts  
by increasing its volume. Basically the package consists  
of a paper bag inside of which there is a certain amount  
of corn kernels and spices necessary so that, by heating,  
classic popcorn is formed. This is all done inside the  
10 container itself.

Obtainment of popcorn from the corresponding kernels  
is carried out in machines especially conceived for this  
purpose. In the event a user wants to prepare the popcorn  
15 himself, he should heat the kernels in a frying pan or  
similar vessel, adding the corresponding ingredients such  
as salt, sugar, butter, etc., since by heating the corn  
kernels they swell giving rise to so-called popcorn.

It is clear that this type of transformation of the  
20 corn kernels into popcorn, or what is the same the cook-  
ing process that takes place in one's own home involves  
a series of inconveniences and problems, since upon heating  
in a frying pan, the popping up of the kernels when they  
swell due to the heat cannot be avoided. Besides the  
25 grease splashes just like when any product is fried. On  
the other hand, obtainment of popcorn upon using a frying  
pan or similar vessel requires that the popcorn subse-  
quently be packaged by the user himself which obviously on  
most occasions cannot be done as he does not have a suitable  
30 container or bag. Thus, the popcorn must be consumed  
directly from a plate or similar dish.

The present invention is defined by claim 1 appended hereto.

The transformable edible product package object of  
the invention is basically conceived to directly obtain  
35 popcorn by simple heating of the respective kernels in a

1 microwave oven for which purpose the package itself consists of a conveniently folded and treated paper bag or  
container so that it does not deteriorate in the case of  
heating in a microwave oven in such a way that the inside  
5 of the bag will contain sealed the corn kernels with the  
necessary spices depending on the variety of popcorn to  
be prepared. They may be salt, butter, sugar, etc.

The thus formed package is marketed in a transparent  
cover so that the user can prepare by himself popcorn by  
10 simply removing the cover and inserting the package inside  
a microwave oven where the radiation produced by said oven  
involves heating the inside of the package and therefore  
the corn kernels contained in the same, which gives rise  
to swelling or expansion of the corn kernels until the  
15 normal form of a package of popcorn is obtained, since  
the bag will obviously likewise expand as a result of  
the pushing caused by the corn kernels when they swell.

In order to complete the description that is going  
to be made hereinafter and for the purpose of providing  
20 a better understanding of the characteristics of the invention,  
a set of drawings on the basis of whose figures  
the advantages and innovations of the object of the invention  
will be understood more easily is attached.

25 Figure 1.- It shows a general perspective view of  
the transformable edible product package object of the  
invention, package which is formed by a sealed bag provided  
with some side folds and transversal creases to  
form a substantially flat package which can be marketed  
30 inside a transparent cover or wrapper.

Figure 2.- It shows a general perspective view of  
the expanded bag containing the corresponding popcorn or  
swollen corn kernels after heating thereof, forming the  
classic bag of popcorn.

1        In view of these figures one can observe how the  
package object of the invention is formed from a paper  
bag 1 adequately treated so that it does not deteriorate  
at all when it is subjected to radiation of a microwave  
5 oven. This bag 1 has some side folds 2 as well as some  
transversal creases 3. An amount of corn kernels with  
the corresponding spices to prepare classic popcorn is  
located inside thereof. The spices may be butter, sugar,  
etc. As a result of the side folds 2 and transversal  
10 creases 3, the bag can be folded and form a type of package  
substantially flat and sealed, which will be marketed in  
a cover or wrapper in such a way that the user will buy it  
and by himself obtain popcorn from the kernels contained  
inside the bag 1. In order to do so and once the package  
15 has the wrapper or cover taken off in which it is marketed,  
it will be inserted inside a microwave oven in such a way  
that the radiation thereof will produce the heating of  
the corn kernels and therefore the swelling of the same,  
which will lead to their expansion inside bag 1, likewise  
20 swelling the bag as a result of the pressure that these  
expanded or swollen corn kernels exert in order to thus  
obtain the classic bag of popcorn as if it had been pur-  
chased at a shop or factory.

It is obvious that this form of marketing a trans-  
25 formable edible product will turn out to be much cheaper  
for the consumer than if he buys already formed popcorn,  
as usually happens. Besides, the problems involved when  
the user or consumer directly obtains popcorn in his home  
from loose corn kernels are avoided.

30

CLAIMS

1. A transformable edible product package comprising a bag treated against damage from microwave radiation and containing corn kernels, said bag being sealed and having side folds and at least one transverse crease to enable it to lie substantially flat but swell when subjected to microwave irradiation.
2. TRANSFORMABLE EDIBLE PRODUCT PACKAGE essentially characterized in that it is formed by means of an adequately treated paper bag (1), sealed inside which there is an amount of corn kernels with the respective spices to obtain popcorn after introducing said bag (1) inside a microwave oven; with the particular feature that said bag (1) has some side folds (2) and some transversal creases (3) which give rise to the formation of a substantially flat body which the product is sold as, prior to its corresponding swelling or expansion transformation caused by the heating in the microwave oven.
3. A transformable edible product package substantially as hereinbefore described with reference to the accompanying drawings.

**Patents Act 1977**  
**Examiner's report to the Comptroller under**  
**Section 17 (The Search Report)**

Application number  
9103528.7

**Relevant Technical fields**

(i) UK CI (Edition K ) B8K KXX; H5H HMK

(ii) Int CI (Edition 5 ) B65D H05B

**Databases (see over)**

(i) UK Patent Office

(ii)

Search Examiner

Mrs R E Shoefiel

Date of Search

21 March 1991

Documents considered relevant following a search in respect of claims

1, 2

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	EP 0298711 A1 (GENERAL MILLS) (Whole document)	1, 2
X	EP 0256791 A2 (NABISCO) (See especially figures 8, 9 and page 7, line 33 - page 8, line 8)	1, 2
X	US 4806371 (MENDENHALL) (Whole document)	1, 2
X	US 4548826 (WATKINS) (See especially figure 6 and figure 10)	1, 2
X	US 4571337 (CAGE ET AL)	1, 2



Category	Identity of document and relevant passages	Relevant to claim(s)

#### Categories of documents

**X:** Document indicating lack of novelty or of inventive step.

**Y:** Document indicating lack of inventive step if combined with one or more other documents of the same category.

**A:** Document indicating technological background and/or state of the art.

**P:** Document published on or after the declared priority date but before the filing date of the present application.

**E:** Patent document published on or after, but with priority date earlier than, the filing date of the present application.

**&:** Member of the same patent family, corresponding document.

**Databases:** The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).